

We claim:

1. Process for extraction of β -carotene from *Eichhornia crassipes*, the process comprising:
 - (a) drying plant material of *Eichhornia crassipes* to reduce water content;
 - (b) grinding the dried plant material to obtain powdered plant material;
 - 5 (c) soaking the powdered plant material in an organic solvent to obtain a solvent extract;
 - (d) filtering the solvent extract to obtain a filtered extract containing carotenoids and chlorophyll, and residual plant material;
 - (e) re-extracting the residual plant material with an organic solvent to obtain a solvent extract and repeating step (d) to obtain a filtered extract;
 - 10 (f) combining the two filtered extracts of steps (d) and (e) and concentrating the filtered extract under recycling of recovered solvent to obtain a concentrated extract;
 - (g) dissolving the concentrated extract obtained in step (f) in a polar solvent to obtain β -carotene concentrate, removing the polar solvent and separating the β -carotene;
2. Process as claimed in claim 1 wherein the *Eichhornia crassipes* plant material includes
 - 15 entire plant or any of the parts thereof.
3. Process as claimed in claim 1 wherein the *Eichhornia crassipes* plant material comprises 5-7 months matured flowering plant material.
4. Process as claimed in claim 1 wherein the solvent used in steps (d) and (e) is selected from the group consisting of n-hexane, petroleum ether and chloroform.
- 20 5. Process as claimed in claim 1 wherein the drying in step (a) is carried out in shade.
6. Process as claimed in claim 1 wherein step (c) is carried out under agitation.
7. Process as claimed in claim 1 wherein the polar solvent used in step (g) is selected from the group consisting of methyl ethyl ketone, acetone, methylene dichloride and chloroform.
- 25 8. Process as claimed in claim 1 wherein the extraction in step (d) and (e) is carried out at ambient temperature and without agitation.
9. Process as claimed in claim 1 wherein the drying in step (a) is carried out till the water content in the plant material is reduced by 75 to 80%.
10. Process as claimed in claim 1 wherein the β -carotene is separated by column
 - 30 chromatography.